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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,692	07/02/2004	Jun Watanabe	4924-0104PUS1	2438
2292	7590	07/14/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HAMPTON HIGHTOWER, PATRICIA	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,692

Applicant(s)

WATANABE, JUN

Examiner

Patricia Hightower

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Information Disclosure Statement***

The information disclosure statement filed July 02, 2004 has been considered and has been made of record.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terminology is considered to render the claims indefinite because it is not clear what the applicants are attempting to convey; "***characterized by***", it is suggested that the applicant the term - - wherein - -, "***column-type***", the inclusion of the term ***type*** renders the definite term "column" indefinite by extending the scope of an otherwise definite term. Clarification is requested.

Claims 5 and 10-15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and/or cannot depend from any other multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims 5 and 10-15 have not been further treated on the merits.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ebato et al (USP 5,525,671).

Ebato et al (USP 5,525,671) discloses a continuous production process for a linear lactide copolymer, using a continuous reaction apparatus composed of three or more stirred flow reactors connected in series, comprising the steps of continuously feeding from 50 to 98 parts by weight of a lactide and from 2 to 50 parts by weight of a lactide and from 2 to 50 parts by weight of a polymer having a hydroxyl group in molten state or as dissolved in a solvent to the first reactor of said continuous reaction apparatus, and transferring the reaction mixture from said first reactor to the following reactors successively while maintaining the reaction pressure and the reaction temperature in every reactor in the range of 1 to 5 atm. And of from 140° to 210°C, to conduct ring-opening copolymerization; that anticipates the claimed invention. See abstract; the drawings; col. 2, lines 23-67; col. 3, lines 1-35, 45-67; col. 4, lines 1-34; col. 5, lines 12-31, 60-67; col. 6, lines 44-67; col. 7, lines 1-65; col. 8, lines 23-67; col. 9, lines 42-67; col. 10, lines 8-67; col. 11, lines 1-21, 28-36, 50-67; col. 12, lines 1-8, especially, lines 9-66; cols. 13-14; the examples; the claims.

Ebato'671 teaches at col. 12, lines 1-8, in preparing a lactide copolymer from a lactide and a hydroxyl-containing polymer in the presence of a catalyst, the reaction system may further contain a cyclic ester other than lactide, such as glycolide and lactones, especially  $\epsilon$ -caprolactone and  $\delta$ -valerolactone. According as the amount of

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glycolide or lactones increases, the glass transition point of the polymer produced decreases and becomes softer.

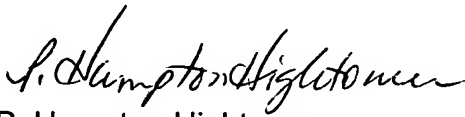
***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are cited to show the state of the art of polylactide/glycolide copolymers and mono- and difunctional initiators used in preparing polylactone copolymers; Pham, Gruber, Ebato and Newman, Jr. et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Hightower whose telephone number is (571) 272-1073. The examiner can normally be reached on M-F from 9:30 A.M. - 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
P. Hampton Hightower  
Primary Examiner  
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